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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/816,589	03/31/2004	Xuming Chen	03356/0200492-US0	8431

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EXAMINER	
MANOHARAN, MUTHUSWAMY GANAPATHY	
ART UNIT	PAPER NUMBER
2617	

DATE MAILED: 11/09/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/816,589	CHEN ET AL.	
	Examiner	Art Unit	
	Muthuswamy G. Manoharan	2617	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *17 April 2006*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-23* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-23* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Response to Arguments

Applicant's arguments filed on 4/17/2006 have been fully considered but they are not persuasive.

Examiner respectfully disagrees with applicant's assertion on Page 8 of the remarks, "Cantwell in combination with Kuisma fails to disclose or suggest method steps for first classifying error conditions as temporal or permanent, and then performing one or more retry attempts only if the error condition is judged to be temporal". The phrase in the claim limitation "**temporal error conditions**" and "**permanent error conditions**" are very broad and therefore, interpreted broadly.

Applicant recites in the specification," temporal problems are problems that can be expected to be resolved after passage of time". Since no time duration is specified, it could mean that "**all problems are temporal problems**".

Cantwell teaches a method wherein the mobile station is making "**plurality of attempts at establishing connection** with the base station".

The phrase," **permanent error conditions**" is very vague. How can one decide on the error conditions as permanent? It requires infinite number of retry attempts to decide whether the error conditions are permanent error conditions or not. The action by the MMSC/SMSC in sending the notifying messages to the terminal in the response message is an indication that there is a probability of success in transmitting the messages to the terminal (in other words there is no permanent error conditions) ([Paragraph [0038,0041]). Applicant did not specify the definition of the permanent error

conditions into the claim limitations; therefore, the rejection based on broader interpretation of permanent error conditions is a valid one.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 1-16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kuisma et al (hereinafter Kuisma) (US 2002/0078228) in view of Cantwell et al. (hereinafter Cantwell) (US 6553237).

Regarding claim 1, Kuisma teaches a method for handling wireless messaging errors resulting from an attempted receipt of a message by a wireless telephone comprising the steps of:

receiving a message notification from a first messaging switch, the message notification being associated with a message at a second messaging switch (Paragraph [0005], lines 8-9);

initially attempting to retrieve the message from the second messaging switch (Paragraph [0002], lines 20-24);

Kuisma did not teach specifically, if an error message describing an error condition is received from the second messaging switch, then classifying the error condition as temporal or permanent; and if the error condition is temporal, then automatically performing a plurality of retry attempts to retrieve the message, each retry attempt being performed after a corresponding waiting period has passed since the previous attempt to retrieve the message.

However, Cantwell, teaches in an analogous art, a method wherein if an error message describing an error condition is received from the second messaging switch, then classifying the error condition as temporal or permanent (Col. 4, lines 46-48); and if the error condition is temporal, then automatically performing a plurality of retry attempts to retrieve the message, each retry attempt being performed after a corresponding waiting period has passed since the previous attempt to retrieve the message (Figure 2,3; Col. 2, lines 16-28).

Therefore, it would be obvious to one of ordinary skill in the art at the time of invention to use the method wherein if an error message describing an error condition is received from the second messaging switch, then classifying the error condition as temporal or permanent; and if the error condition is temporal, then automatically performing a plurality of retry attempts to retrieve the message, each retry attempt being performed after a corresponding waiting period has passed since the previous attempt to retrieve the message. This modification reduces the load on the base unit and thereby reduces the likelihood of a complete system failure.

Regarding claim 2, Kuisma in view of Cantwell teaches all the particulars of the cliam, except wherein each waiting period is longer than the preceding waiting period. However, Cantwell teaches in an analogous art, the method wherein each waiting period is longer than the preceding waiting period (Col. 2; lines 24-28; Col. 3, lines 12-19). Therefore, it would be obvious to one of ordinary skill in the art, at the time of invention to use the method wherein each waiting period is longer than the preceding waiting period. This method helps reducing collisions between the particular remote unit and the other remote units.

Regarding claim 3, Kuisma in view of Cantwell teaches all the particulars of the claim, except wherein each retry attempt comprises the steps of: determining whether the wireless telephone is currently in use; and attempting to retrieve the message when the wireless telephone is not in use. However, Cantwell teaches in an analogous art, the method wherein each retry attempt comprises the steps of: determining whether the wireless telephone is currently in use; and attempting to retrieve the message when the wireless telephone is not in use (Col. 3, lines 34-37). Therefore, it would be obvious to one of ordinary skill in the art, at the time of invention to use the method wherein each retry attempt comprises the steps of: determining whether the wireless telephone is currently in use; and attempting to retrieve the message when the wireless telephone is not in use. This modification helps one to make sure the availability of the channel for multimedia transmission.

Regarding claim 4, Kuisma in view of Cantwell teaches all the particulars of the claim 3. Kuisma did not teach expressly the method further comprising the steps of: determining whether a second message has been successfully sent to or received from the wireless telephone; upon determination that a second message has been sent or received from the wireless telephone, attempting a retry for the message without waiting the corresponding waiting period. However, Cantwell teaches in an analogous art, the method further comprising the steps of: determining whether a second message has been successfully sent to or received from the wireless telephone; upon determination that a second message has been sent or received from the wireless telephone, attempting a retry for the message without waiting the corresponding waiting period (Col. 3, lines 10-22). (The waiting period is implemented just to avoid collision (of messages) between remote units. Therefore, no waiting period is required if the transmission is successful.) Therefore, it would be obvious to one of ordinary skill in the art at the time of invention to use the method of claim 3, further comprising the steps of: determining whether a second message has been successfully sent to or received from the wireless telephone; upon determination that a second message has been sent or received from the wireless telephone, attempting a retry for the message without waiting the corresponding waiting period. This modification helps the mobile unit to access the resources quickly.

Regarding claim 5, Kuisma teaches the method of claim 1, wherein the first messaging switch is associated with text messages ("SMS", Paragraph [0005], line 1),

and the second messaging switch is associated with multimedia messages ("MMSC", Paragraph [0002], line 23).

Regarding claim 6, Kuisma teaches the method of claim 5, wherein the first messaging switch includes an SMSC (Paragraph [0005], line 8) and the second messaging switch includes an MMSC (Paragraph [0002], line 23).

Regarding claim 7, Kuisma in view of Cantwell teaches all the particulars of the claim except, wherein the wireless telephone is provided with a maximum number of retry attempts and further comprising the step of: modifying the maximum number of retry attempts. However, Cantwell teaches in an analogous art, the method wherein the wireless telephone is provided with a maximum number of retry attempts and further comprising the step of: modifying the maximum number of retry attempts (items 207,212 in Figure 2; parameters n,m can be set to any numbers). Therefore, it would be obvious to one of ordinary skill in the art at the time of invention to use the method, wherein the wireless telephone is provided with a maximum number of retry attempts and further comprising the step of: modifying the maximum number of retry attempts. This modification makes the system more flexible.

Regarding claim 8, Kuisma in view of Cantwell teaches all the particulars of the claim except, the method of claim 7, further comprising the step of: modifying the length of one or more of the corresponding waiting periods. However, Cantwell

teaches in an analogous art, the method, further comprising the step of: modifying the length of one or more of the corresponding waiting periods (item 300 in Figure 3). Therefore, it would be obvious to one of ordinary skill in the art at the time of invention to use the method, further comprising the step of: modifying the length of one or more of the corresponding waiting periods so as to make the system flexible.

Regarding claim 9, Kuisma teaches a method for handling wireless messaging errors resulting from an attempted receipt of a message by a wireless telephone comprising the steps of:

receiving a message notification from a first messaging switch, the message notification being associated with a message at a second messaging switch (Paragraph [0005], lines 8-9);

initially attempting to retrieve the message from the second messaging switch (Paragraph [0002], lines 20-24).

Huisma did not teach specifically, if an error message describing an error condition is received from the second messaging switch, then classifying the error condition as temporal or permanent and if the error condition is temporal then: automatically performing a first retry attempt to retrieve the message, the first retry attempt being performed after a first waiting period has elapsed after the classifying step; automatically performing a second retry attempt to retrieve the message, the second retry attempt being performed after a second waiting period has elapsed after the first retry attempt; and automatically performing a third retry attempt to retrieve the

message, the third retry attempt being performed after a third waiting period has elapsed after the second retry attempt.

However, Cantwell teaches in an analogous art, the method wherein if an error message describing an error condition is received from the second messaging switch, then classifying the error condition as temporal or permanent and if the error condition is temporal then: automatically performing a first retry attempt to retrieve the message, the first retry attempt being performed after a first waiting period has elapsed after the classifying step (items 203-207 in Figure 1);

automatically performing a second retry attempt to retrieve the message, the second retry attempt being performed after a second waiting period has elapsed after the first retry attempt (items 208-212 in Figure 2);

and automatically performing a third retry attempt to retrieve the message, the third retry attempt being performed after a third waiting period has elapsed after the second retry attempt (items 213-214 in Figure 2).

Therefore, it would be obvious to one of ordinary skill in the art at the time of invention to use the method wherein if an error message describing an error condition is received from the second messaging switch, then classifying the error condition as temporal or permanent and if the error condition is temporal then: automatically performing a first retry attempt to retrieve the message, the first retry attempt being performed after a first waiting period has elapsed after the classifying step; automatically performing a second retry attempt to retrieve the message, the second retry attempt being performed after a second waiting period has elapsed after the first

retry attempt; and automatically performing a third retry attempt to retrieve the message, the third retry attempt being performed after a third waiting period has elapsed after the second retry attempt. This modification reduces the load on the base unit and thereby reduces the likelihood of a complete system failure.

Regarding claim 10, Kuisma in view of Canton teaches all the particulars of the claim except wherein the third waiting period is longer than the second waiting period, and the second waiting period is longer than the first waiting period. However, Canton teaches in an analogous art, the method, wherein the third waiting period is longer than the second waiting period, and the second waiting period is longer than the first waiting period (Col. 4, lines 58-60). Therefore, it would be obvious to one of ordinary skill in the art at the time of invention to use the method, wherein the third waiting period is longer than the second waiting period, and the second waiting period is longer than the first waiting period. This reduces the likelihood of collisions with other remote units that are attempting to establish a connection.

Regarding claim 11, Kuisma in view of Canton teaches all the particulars of the claim 10.

Canton also teaches first waiting period, second waiting period and third waiting period with increasing order of waiting period values from first to third. These are all system design choices that the network provider can make to optimize the control of these requests for network resources (Col. 6, lines 6-9).

Any suitable choice of parameter values of the waiting period (increasing order while going from first to third) can be chosen by the network provider to optimize the control of these requests for network resources. Therefore, one can conclude that Canton teaches the all the limitations of this particular claim 11.

Claim 12 is rejected for the reasons as set forth in claim 3.

Claim 13 is rejected for the reasons as set forth in claim 4.

Claim 14 is rejected for the reasons as set forth in claim 5.

Claim 15 is rejected for the reasons as set forth in claim 6.

Claim 16 is rejected for the reasons as set forth in claim 7.

Claims 17 is rejected under 35 U.S.C. 103(a) as being unpatentable over Kuisma et al (hereinafter Kuisma) (US 2002/0078228) in view of Cantwell et al. (hereinafter Cantwell) (US 6553237) and further in view of Alvarez et al. (hereinafter Alvarez) (US 2006/0121889).

Regarding claim 17, Kuisma in view of Cantwell teaches all the particulars of the claim 1, except the method of claim further comprising the steps of: counting the number of retry attempts (items 207 and 212 in Figure 2; Cantwell); and when the current number of retry attempts exceeds a predetermined number, terminating the performance of retry attempts. However, Alvarez teaches in an analogous art the method of claim further comprising the steps of: counting the number of retry attempts; and when the current number of retry attempts exceeds a predetermined number,

terminating the performance of retry attempts (Paragraph [0090], lines 9-12). Therefore, it would be obvious to one of ordinary skill in the art at the time of invention to use the method of claim further comprising the steps of: counting the number of retry attempts; and when the current number of retry attempts exceeds a predetermined number, terminating the performance of retry attempts. This modification helps the sender to decide on alternate methods or if the is a service provider then this modification helps in the billing process. These types of error handling are well known in the art.

Claims 18-23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kuisma et al (hereinafter Kuisma) (US 2002/0078228) in view of Cantwell et al. (hereinafter Cantwell) (US 6553237) and further in view of Crocker et al. (hereinafter Crocker) (US 2004/0198366.

Regarding claims 18, Kuisma in view of Cantwell teaches all the particulars of the claim except the method of claim wherein the maximum number of retry attempts is modified according to change in a monitored characteristics of the wireless network. However, Crocker teaches in an analogous art the method of claim wherein the maximum number of attempts is modified according to change in monitored characteristics of the wireless network (Paragraph [0031]) Therefore, it would be obvious to one of ordinary skill in the art at the time of invention to use the method claim wherein the maximum number of attempts is modified according to change in a monitored characteristics of the wireless network in order to provide a reliable communication.

Regarding claims 19 (22), Kuisma in view of Cantwell and further in view of Crocker teaches all the particulars of the claims 18 (21). Neither Kuisma nor cantwell teaches the method of claim wherein the monitored characteristic is selected from the group consisting of load, capacity, and availability and success rate of message transmission. However, Crocker further teaches the method of claim wherein the monitored characteristic is selected from the group consisting of load, capacity, and availability and success rate of message transmission (paragraph [0031, 0032, 0043]). Therefore, it would be obvious to one of ordinary skill in the art at the time of invention to use the method of claim wherein the monitored characteristic is selected from the group consisting of load, capacity, and availability and success rate of message transmission in order to provide a reliable communication. This claim limitation is well known in the art as admitted by the applicant.

Regarding claims 20, Kuisma in view of Cantwell teaches all the particulars of the claim except the method of claim wherein the maximum number of attempts is modified according to physical location of the wireless telephone. However, Crocker teaches in an analogous art the method of claim wherein the maximum number of attempts is modified according to physical location of the wireless telephone ("factor that may influence the choice of communication link including the type failure ...the location of the mobile vehicle", Paragraph [0031]; Paragraph [0038], lines 6-9). Therefore, it would be obvious to one of ordinary skill in the art at the time of invention to use the method claim wherein the maximum number of attempts is modified according to physical location of the wireless telephone in order to provide a reliable communication.

Regarding claims 21, Kuisma in view of Cantwell teaches all the particulars of the claim except the method of claim wherein the length of one or more of the corresponding waiting periods is modified according to change in a monitored characteristics of the wireless network. However, Crocker teaches in an analogous art the method of claim wherein the length of one or more of the corresponding waiting periods modified according to change in monitored characteristics of the wireless network (Paragraph [0031], "a reconnect attempt time period", Paragraph [0031], lines 20-23) Therefore, it would be obvious to one of ordinary skill in the art at the time of invention to use the method claim wherein the length of one or more of the corresponding waiting periods is modified according to change in a monitored characteristics of the wireless network in order to provide a reliable communication.

Regarding claims 23, Kuisma in view of Cantwell teaches all the particulars of the claim except the method of claim wherein the length of one or more of the corresponding waiting periods is modified according to physical location of the wireless telephone. However, Crocker teaches in an analogous art the method of claim wherein the length of one or more of the corresponding waiting periods is modified according to physical location of the wireless telephone ("factor that may influence the choice of communication link including the type failure ...the location of the mobile vehicle", Paragraph [0031], "a reconnect attempt time period", Paragraph [0031], lines 20-23). Therefore, it would be obvious to one of ordinary skill in the art at the time of invention to use the method claim wherein the length of one or more of the corresponding waiting

periods is modified according to physical location of the wireless telephone in order to provide a reliable communication.

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Muthuswamy G. Manoharan whose telephone number is 571-272-5515. The examiner can normally be reached on 7:30AM-4:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Lester Kincaid can be reached on 571-272-7922. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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